

11017 U.S. PTO  
02/11/02

A. TITLE

IMPROVED WOUND TREATMENT BANDAGE

11017 U.S. PTO  
10/07/2229  
02/11/02

10072229, 021102

The PTO did not receive the following  
listed item(s) transmittal postcard  
listed item(s) \_\_\_\_\_

1

C. KNOWN PRIOR ART

2

None.

2011 06 22 10:00

1           D.   DISCUSSION OF PRIOR ART AND BACKGROUND OF INVENTION

2           The subject invention is a bandage member similar to a band aid  
3           which is adapted to cover a wound, infected area, or sore on a person's  
4           skin. This invention is considered to be a refinement or improvement  
5           on the existing status of such band aid member.

6           As is well known, band aids are used to cover a cut, wound or  
7           even some infected area on the skin to protect that area from further  
8           germs or other exacerbations of the problem area. These bandage  
9           members are well known and effective to cover a wounded area from  
10          exacerbation or further problems, and are generally effective for such  
11          purposes. Moreover, in the more recent evolutions, the undersurface  
12          of the band aid may be coated with an antibiotic as a further protective  
13          measure for the wound.

14          However, not all skin surface problems are just wounds, as many  
15          problems may include skin infections such as warts, psoriasis, plant  
16          poison reactions, general surface infections not caused by skin  
17          wounds, and numerous other problems, including skin cancers. For  
18          these types of skin problems, it is common to use non-prescription  
19          ointments such as salves, or creams with some antibiotic properties,  
20          or other healing agents. Additionally, for more severe skin condi-  
21          tions, prescription drugs in the form of cream applications or salves,  
22          or external medicinal applications are prescribed and used.

23          A large percentage of these skin problems are usually localized  
24          in a given skin area, sometimes being as small as a few centimeters  
25          in diameter or less, while other are a little larger. Some skin  
26          disorders may be widespread and covering large areas of the skin

1007229 0310  
20722 5222007

1 over which area some medicine needs to be applied.

2 As to the localized and smaller areas of skin disorders to which  
3 medicine is to be applied, once the prescribed medication is applied  
4 to the specific skin area, there is no general or effective means to  
5 keep the medication in place for the necessary duration to treat the  
6 skin area. For example, the nature of the substances used for  
7 medical treatment results in the substance spreading beyond the skin  
8 problem area to areas that are not infected or affected by the  
9 problem. The spreading or movement of the treating medication can  
10 be aggravated by body movements, and the medication, depending on its  
11 location, can be picked up by and absorbed by clothing or other contact.  
12 In short, when the medication is applied to a localized problem skin  
13 area, there is no effective means to keep medication in place in  
14 sufficiently concentrated amounts to adequately treat the area.  
15 Applying a band aid over the medicated area helps to some degree but  
16 using such could result only in more spreading or absorption of the  
17 medication in a large surface area of the band aid.

18 The problem discussed above is not simply a problem of losing  
19 the effectiveness of concentrated amounts of a necessary medication.  
20 There is the additional problem that such medications often have  
21 some deleterious and adverse effect on non-infected skin areas, and  
22 the problem of having the medication spreading to non-infected  
23 areas may result in skin damage to such areas, particularly when  
24 the applied medication has caustic or other dangerous side effects  
25 to the skin. Under such latter circumstances, it is important and  
26 vital to keep the medication localized to the problem area as much

1 as possible.

2 Since there are no known means to effectively prevent this  
3 problem of medication straying or spreading from the intended in-  
4 fected area, this invention is conceived as a result and the follow-  
5 ing objects of the subject invention are directed accordingly.

6 Priority of filing is based On Applicants provisional  
7 application serial number 60-306393 filed July 20, 2001

8

9

10

11

10072229-024102

10072229-034103

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

D. OBJECTS

It is an object of the subject invention to provide an improved band aid device;

A further object of the subject invention is to provide a novel bandage device for concentrating medicinal applications to limited skin areas;

Yet another object of the subject invention is to provide an improved health protection device;

A further object of the subject invention is to provide an improved bandage to help prevent the spread of skin infections;

Still another object of the subject invention is to provide an improved skin protective device;

A further object of the subject invention is to provide a band aid to aid in the concentrated application of medicine;

Yet another object of the subject invention is to provide an improved device to aid in the application of skin medication;

Other and further objects of the subject invention will become apparent from a reading of the following description taken in conjunction with the claims.

1 E. DRAWINGS

2 " FIG. 1 is a side elevational view of the device incorporating  
3 the subject invention, showing the medicinal container in the open  
4 position;

5 FIG. 2 is a top elevational view of the apparatus incorporating  
6 the subject invention;

7 FIG. 3 is a side elevational view of the apparatus incorporating  
8 the subject invention, showing the medicinal container in the closed  
9 position;

10 FIG. 4 is a top elevational view of the subject invention show-  
11 ing the medicinal container in the closed position.

1                   F.   DESCRIPTION OF GENERAL EMBODIMENT

2           The subject invention is an improved Band Aid<sup>(R)</sup> (bandage  
3 covering) for use in treatment of wounds where medication is to be  
4 administered to a surface wound, infection, or other problem on  
5 the skin of an individual, such band aid comprising, in general,  
6 a bandage member or similar member adapted to cover the skin area  
7 where the wound is located, such bandage member having a portion  
8 thereof with an opening on the upper bandage surface that extends  
9 to the lower surface of the bandage and which opening has a remov-  
10 able cover over the upper part thereof with the opening being used  
11 to insert medication to reach a specific wound area under the  
12 bandage and which opening is then recovered after the mediciation  
13 is so placed.

14           In general and in summary, the subject invention is a band aid  
15 type bandage member that is basically structured as a conventional  
16 band aid having an upper surface comprised of some protective cover-  
17 ing material and a lower surface part of which has an adhesive coat-  
18 ing to adhere the member to the skin, and part of which lower surface  
19 has a bandage covering for placement over the skin wound. In the  
20 structural adaptation covered herein, the band aid member has an  
21 opening that extends downwardly from the upper surface to and through  
22 the lower surface. This opening is adapted to be positioned over  
23 a wound or infected area of the skin. Once the band aid member is  
24 placed on the skin with the opening being placed over the particular  
25 infected area of the skin, a medicinal application, whether it be  
26 liquid, or a viscous cream, or whatever is placed into the opening



1 at the upper surface of the band aid to permit the medicinal substance  
2 to seep downwardly through the opening to the bottom of the opening  
3 at the lower surface to reach the infected area.

4 In the general embodiment therein a cover flap will be appended  
5 to the upper surface of the band aid member to cover the opening once  
6 the medicine is placed in the opening. This cover will obviously  
7 function to retain medicine in the opening to seep downwardly over  
8 the wound. Thus, once the band aid member is affixed in place  
9 the cover flap is placed and secured over the opening, the medi-  
10 cal substance will be limited to the opening area over the infected  
11 skin area. This will keep the medicine only over the infected area  
12 and will prevent it from spreading to non-infected areas or simply  
13 falling off the skin.

10072229-021103

1                   G.   DESCRIPTION OF PREFERRED EMBODIMENT

2           In describing the preferred embodiment, it is to be stressed  
3   that the following description is of only one embodiment within the  
4   overall scope of the subject invention and that the subject invention  
5   may encompass other embodiments, as seen in the claims annexed hereto.  
6   Therefore, the following description shall not be considered as  
7   limiting the scope of the invention herein, as more fully set forth  
8   in the claims annexed hereto.

9           Referring now to the drawings in which a preferred embodiment  
10   of the subject invention is shown. A band aid 10 is shown as being  
11   the device incorporating the features of the subject invention, such  
12   device 10 being basically comprised of a longitudinally extending  
13   band aid member 10 having a first end 20 and a second end 30, and  
14   a first lateral side edge 40 and a second lateral side edge 45.  
15   Such band aid has an upper surface 50 and a lower surface 60. The  
16   upper surface 50 of the band aid member is comprised of a protective  
17   material such as plastic, fabric or other material to shield the skin  
18   from germs, moisture or other substances that would interfere with  
19   the healing of the skin or infected area on the skin. The lower  
20   surface 60 of the band aid has areas covered with adhesive substances  
21   to help adhere the band aid 10 to the specific areas of the skin.  
22   It is noted that in this particular embodiment of the invention, it  
23   may be preferable to have the entire lower surface 60 of the band  
24   aid coated with adhesive material, as an option to having some  
25   bandage material in the middle portion. By this arrangement, there  
26   will be adhesive materials surrounding the bottom of the opening

1 in the band aid to keep the lower surface 60 sealed against the skin  
2 to block the radially outer movement of applied medication away from  
3 the wound or infected area. This aspect is more fully discussed  
4 below.

5 As thus far described above, the band aid structure is generally  
6 conventional. In the preferred embodiment of the subject invention,  
7 an upper entrance opening 100 is formed in the upper surface 50 of  
8 the band aid 10, preferably but not essentially circular, which  
9 opening extends completely through the band aid from such upper surface  
10 to bottom surface 60 to a lower exit opening on the lower surface.  
11 This opening may have as an optional feature a conformingly-shaped  
12 cup 120, which is seated concentrically and securely in the opening  
13 100 so that the cup 120 is held firmly within the opening. As seen,  
14 the cup 120 would have a bottom opening 130 and a top opening 140  
15 into which medicine can be poured to be held temporarily in the cup  
16 to seep down through a narrowed throat 150 in the cup to the bottom  
17 opening 130. The bottom opening would preferably be large enough  
18 to encircle the wound or infected area. The upper opening of the  
19 cup 120 would have a closure lid 170 which would be fastened in place  
20 after the medicine is placed on the wound.

21 Alternately, the opening 100 may not have a cup therein, and  
22 medication could simply be placed in the opening to cover the parti-  
23 cular area of the skin involved. In one embodiment of this latter  
24 structure, the upper opening may have a cover flap 200 to be placed  
25 flush against the opening and sealed at the other end to the upper  
26 portion of the band aid.

1           It is to be noted that band aids of different sizes with varying  
2 opening sizes may be provided, depending on the size of the affected  
3 skin area. Other embodiments are contemplated as being within the  
4 scope of this invention, and in this respect the subject invention  
5 is not limited to the shapes and sizes described.

6

7

8

9

10

10072229-021102